

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: "BRIAN L. LEWIS" <76500.1621@compuserve.com>
Subject: [2413] 40 meter coil
Message-ID: <960106034101_76500.1621_HHE47-1@CompuServe.COM>

I am making my first attempt at homebrewing a transmitter. I am looking at the schematic from W3FQJ's "Solid State QRP Project" book. This 1 watt transmitter uses a 2N3053 transistor. It requires a toroidal coil to be wound. This book (1970) calls for a "Amitron 0.68" E" toroid.

What does "Amitron 0.68" E" convert to in the current Amidon Catalog?

Does anyone have Jan Crystals address? Are they still around?

Where do you get #24 enamel wire.

This transmitter will be for 40 meters and use a fundamental crystal.

This looks like a simple project. One that a beginner like me can handle.

Thanks for the help!

Brian L. Lewis
N50CD QRP-L #324
Shreveport, La.
76500.1621@compuserve.com

Brian
05-Jan-1996 21:39:02 CST

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: wdzeares@ix.netcom.com (W. Dennis Zeares)
Subject: [2439] data invasion of 40 cw
Message-ID: <199601062340.PAA11037@ix13.ix.netcom.com>

40 Meters CW has really taken a challenging twist...at my place in Dallas today, the "data" types were all over the "established" cw portion of the band, from 7035 through 7047....is this a trend or is this a new band plan...or is this an organized effort to take over the cw portion???? makes 40 qrp cw a little more difficult...any ideas about this trend...and if this is a forbidden topic for this list, then disregard and accept my apology...I'm just a little worried about by beloved 7040 +/- qrm....72, Dennis K3ETS

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: paul1@wizard.ucs.sfu.ca (Paul Erickson)
Subject: [2424] FS: HW-8
Message-ID: <9601060652.AA10966@wizard.ucs.sfu.ca>

Two prior deals fell through so...

For sale: HW-8 and power supply. Open to offers

cheers, Paul
ve7cqk
email: paul1@wizard.ucs.sfu.ca

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: wayneb@on-ramp.ior.com (wayne barnhart)
Subject: [2423] keyers
Message-ID: <m0tYSHm-000RttC@on-ramp.ior.com>

Would like to thank all those who responded to my request for 6811 keyer ideas. Some of them, like haveing a built in data base for storing call signs I am sure would have slipped right past me. Work 'em now, log 'em later :)

73's

Wayne Barnhart WB7WHI
Spokane, Wa.

Dirt is good!

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: camqrp@cyberg8t.com (Cam Hartford)
Subject: [2433] Missing Fall Contest Scores

Message-ID: <199601062040.MAA19918@key.cyberg8t.com>

Gang -

I succeeded in lopping off the last five entrants in the Fall QSO Party scores, as published in the January QQ. They lost entries were all Low-Band, and should have followed in line after K3TKS:

Call====Score

W2RPH	61,411
W03B	32,400
N2MNN	30,751
WZ2T	9,492
KE4MIQ	84

A combination of late hours and fat fingers did the trick. Thanks to Richard, WZ2T, for bringing the problem to my attention. Richard, I know you were hoping that your entry was lost in the mail, but no such luck. At least you weren't last!

Thanks to all for participating - this was by far the biggest contest we have had to date, and no telling what might have happened if it weren't for all of K7YHA's neighbors.

72/73,

Cam N6GA

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: Steve Miller <kg7pv@teleport.com>
Subject: [2438] More basic torroid/choke info
Message-ID: <199601062158.NAA18566@desiree.teleport.com>

Brian, ok then it sounds alot like some of the designs I have in the books here. The design on page 151 of " W1FB DESIGN NOTEBOOK" - an ARRL Book you should have along with his two "QRP NOTEBOOKS" just for the circuits and explanations - uses a T37-6 with the primary (toward the transistor) having 24 turns of #26 and the secondary having 3 turns of #26. The wire size can be varied up or down one size without much change in the value of the resulting winding. (no flames please)

The books mentioned are a very good starting point. Read the QRP Notebooks first (one then two) and then the Design Notebook followed by the classic "Solid State Design for the Radio Amateur. The four books are, when read in

series, a real tutorial in QRP and radio design. I have re-read each as I learn more and more. Some of, well a lot of :-) went right over my head the first time!

If you call Amidon to buy an assortment then here is what I'd get - these will cover you for most projects and if you don't have the exact size then just calculate the # of turns needed for the size you have. They will send a neat booklet that explains way more than you'll ever need to know. You can buy some binocular cores later when you are building more stuff.

Type 43 size 37 ie FT37-43 FT37-61
 61

(you could buy a bigger size too. ie FT50-43 FT50-61)

Type 2 red sizes 37, 50, 68 ie T37-2 T50-2 T68-2
 6 yellow same sizes ie T37-6 T50-6 T68-6
 7 white same sizes ie T37-7 T50-7 T68-7

The white type 7 is used in VFO circuits like the Norcal while the 2 and 6 are used in the various chokes, transformers and inductors found throughout the qrp world.

Hope this helps. 73 and cu on 40 meters!

Steve Miller KG7PV
Norcal # 308, QRP-L #109

From qrp-l@lehigh.edu Sat Jan 6 21:18:48 1996
From: NYOUNG@nova.wright.edu
Subject: [2443] Oh no! Not that guy again! VLF radios, caves & SPRAT arrivals
Message-ID: <01HZPCU4Q83S94ENGs@nova.wright.edu>

Did anyone check out the write up of John Hey's "SSB Cave Radio System" what appeared in the recent (yeah, mine arrived in December) SPRAT? He's got a radio (a radio?) on 40 kHz working SSB in caves, as I read the article. Pretty neat. Bet that's a definitel ground plane system, eh? That or we have evidence of wave guide theory in underground locations that may be useful in finding the whereabouts of _The_Last_Elvis!

Really, though, I remember from my youth (that period of time before high school, which means before drugs, sex & rock-n-roll) reading in either Pop Sci or Pop Electronics about a two-way comm system that used (if memory or what's left of it serves) two pieces of rod poked into the ground. The particulars, as usual, escape me. But all this talk of VLF and "nature radio" and now John's cave radio has me thinking that I ain't quite all that psychotic yet.

Anyone seen or remember this stuff? I'd really like a witness before my release hearing next month. I mean, it's starting to look like I've dream this all before. Well, everything except those signals that I get from the lights in the morning when I feed the fish that come out of the radio by the box of cereal.

And furthermore, damned if I can remember what 0 dbm on a Boonton RF millivolt meter used to be in volts. I know it's different than an AF millivoltmeter's version of 0 db. Hints?

I gotta go. The orderlies are coming and it's time for tapioca anyway.

73
Nils
WB8IJN

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: paul1@wizard.ucs.sfu.ca (Paul Erickson)
Subject: [2420] QRP + computer interface
Message-ID: <9601060544.AA10456@wizard.ucs.sfu.ca>

I was talking with Bruce from index labs about interfacing the qrp+ and he said that he had heard that someone had done it, but didn't have a means of contacting him. Just said that he was active on the internet. Anyone heard of this? I am interested in connecting to use with CT and NA etc.

cheers, Paul
ve7cqk
email: paul1@wizard.ucs.sfu.ca

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: litigate@mi.net (litigate)
Subject: [2437] QRP Rig Recommendation?
Message-ID: <199601062131.RAA17033@itchy.mi.net>

I want to buy a less than 1 watt QRP CW rig. I'm only familiar with the old stuff. What is there for new stuff? I'd prefer something with multi-bands and preferably with a built-in keyer, if there is such a thing. I'd also be interested in buying a mint

HW-8, HW-9 or Argonaut 515 if anyone knows of any. de Rick VE9HF.

* Rick Williams VE9HF *
* 472 Broad St. *
* Fredericton, NB *
* E3A 5L1 CANADA *

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: Wynn C C <wyn@stc06.ctd.ornl.gov>
Subject: [2431] QRPp delivery
Message-ID: <Pine.OSF.3.91.960106101833.12983A-100000@stc06.ctd.ornl.gov>

The Dec 95 QRPp arrived here in Tennessee on Jan. 4, and relatively unscathed by the USPS.

72/73,
Clay N4AOX
wyn@ornl.gov

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: ljones@why.net (ljones)
Subject: [2425] Split qrp-1
Message-ID: <19960106063557306.AAA228@dal36.why.net>

Greetings Gang...

This is mainly a response to Rob, K06KA's comment about splitting the qrp-1 into two different areas. Well, Rob, got your shields up. I think that it is doing quite well, thank you. All the areas that you think need to be split out are what make up ham radio in the first place. All hams (qrpers & groers alike) need antennas, tuners, rigs of all descriptions, counter poises, radials, keyers, etc. I am curious just what it is that you think is not to be part of this reflector. We are hams discussing ham interest. What else could be more natural for this group. We all have questions about the operation, technical and related areas of ham radio. Heck, I've been an EE for some 25+ years and there are still things that I must ask questions about. What better area than this group. The people here are involved in all forms of endovers and just love to be of service to each other. I for one consider it my duty in life to pass on to others any information, wisdom tid-bits that the good Lord has allowed me to learn. I consider myself a book that is on the shelf to be used for learning. It is amazing what one can learn by just asking a question. N'uff said...

72/73

dee-it dee-it

Larry Jones N50SG <><	NorTex	QRP-ARCI	G-QRP	MI-QRP
4028 Random Circle	NorCal	NE-QRP	QRP-L	NTMS
Garland Tx 75043-3250				

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: k7yha@ix.netcom.com (Richard H. Arland)
Subject: [2440] T-T ARgo 515 For Sale
Message-ID: <199601070004.QAA26526@ix7.ix.netcom.com>

Hi Gang:

It's the New Year and time to change radios.

I have a Ten-Tec Argonaut 515 with 2.4 kHz 8-pole xtal filter (installed by factory), 208-A AF filter/notch filter, 210 power supply, S&S eng PC-1 digital readout, and OHR SCAF filter for sale. Includes all manuals. All gear Excellent to Excellent + condition. 515 has been aligned by factory. New dial cord, dial lights and knob set.

\$650 firm, I ship.

Call: (717) 825-5395 or leave e-mail. First come first served.

72/73 rich K7YHA

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: rwright@soml.com (Robert Wright)
Subject: [2422] Take Me to St Louie
Message-ID: <199601060616.WAA00446@sonic.net>

Information: Received a nice note today from Jim Cates today confirming my kit order at #102. This is DESPITE using the wrong zip code in the address to him. So, if you mailed off a request/check to him with the wrong zip, there is no substantial delay (I mailed mine 12/29/95). The custom air variables may cause some delay, but should you so desire, Jim will refund your money at any time. They seem to be going fast so if you want one,

you'd better act quickly.

72/73 Bob WB7CNJ in Santa Rosa CA under starry skies...
Robert Wright
rwright@soml.com

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: VHatley@aol.com
Subject: [2435] Ten-Tec Rigs
Message-ID: <960106130659_33558109@mail04.mail.aol.com>

My main rig is a Ten-Tec Century 21. I love the little radio; it's easy to operate and 25 watts is more than enough power for CW work. But it does have one SERIOUS problem; a direct conversion receiver. At night on 40 meters I can hear the same AM broadcast station from one end of the band to the other. Front-end overload to the MAX. I am thinking about replacing my Century 21 with a different Ten-Tec rig; but being a new HAM I am not familiar with the complete Ten-Tec line. I can't afford a new Omni; (and don't care about that much power anyway and I don't use SSB, CW only); I don't like the removable band modules on the Scout; they're something for the dog to chew on or lose under the bed.

I saw a picture in the 1994 ARRL Handbook of a Argosy; now that looks nice. The caption under the picture said they also built a Argosy II that had digital display and 30 meter, 50 watts out. My ears perked up. Now, if there is someone out there that owns one of those Argosy II or someone who knows the Ten-Tec line, please e-mail me, I want to know all about it. Does it have a superhet receiver? Can they still be found used? What is the going price? Any major problems with this rig?

Sorry, for the bandwidth, I know this isn't a QRP rig, but if I find one that will be how it is operated.

Also, anyone familiar with the Argonaut II? That looks VERY nice.

73
KK5RO
Vernon

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: JEGGER <E7E3EGG@TOE.TOWSON.EDU>
Subject: [2434] unsubscribe e7e3egg@toe.towson.edu
Message-ID: <01HZ0Y00MACY8YFJ1N@TOE.TOWSON.EDU>

unsubscribe e7e3egg@toe.towson.edu

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: ae4ic@nr.infi.net (BOB KELLOGG)
Subject: [2442] wattmeters
Message-ID: <199601070109.UAA23535@moe.infi.net>

Guys,

I've seen questions about wattmeters mentioned lately, but not the follow up. Can some one fill me in?

1. Is the WM-1 (?) OHR wattmeter the same circuit as the W7EL QRP wattmeter?
2. Used OHR meters are asked about frequently. Is it time to think about a group purchase? I'm ready to build a wattmeter.

73,

Bob Kellogg, AE4IC
Prolably, but not nececelery. - Benny Hill

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: Hank Kohl K8DD <k8dd@sun.tir.com>
Subject: [2412] Re: 25 w linear amp
Message-ID: <9601060316.AB10355@tir.com>

At 18:20 01/05/96 EST, you wrote:

>On Fri, 5 Jan 1996, Brien Pepperdine wrote:

>> Anyhow, seeing as I raised the issue of an amp for qrp before, I do have
>

>For some reason this reminds me of the debate on here a couple years ago
>concerning whether we should measure our QRP output from the xmtr or
>from our ERP. Some folks (falsely) felt that 5W output into a "gain"
>antenna was no longer QRP (for contest pruposes).

>

>Oops - hope this isn't misconstrued as "flame bait"! =:0

>

>73 from Hawaii (I'm DX!),

>Jeff NH6IL

>

Should the power be measured:

At the output of the transmitter?
At the output of the transmitter + ERP?
At the end of the feedline?
At the end of the feedline + ERP?

OK - It's not the number of the watts. It's the SIZE of the watts.
There is a difference between your little 5 watts and my BIG .95 watts. Now
the question for discussion - what makes the difference between little and
big watts? And there is a difference. Think about it, and you will understand
that, to paraphrase the CQ shirt that says "DX IS", the truth of the matter
is that it should say "QRP IS"....But only for true believers.

73 Hank K8DD

*/ Hank Kohl K8DD k8dd@tir.com
*/ MI-QRP QRP-ARCI G-QRP NorCal
*/ ARRL/LM QCWA/LM QCAO/LM

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [2414] Re: 25 w linear amp
Message-ID: <199601060405.AAA17687@public.compuser.net>

Brien,

Well I sort of wasn't laughing since I "demand" that I run the full 5 watt
QRP limit in contests since Newfoundland is a LONNNG haul to the States and
my balcony mounted MFJ Super Hi-Q Loop doesn't compete well with Rick
Zabroski's little 4 element 20 meter bomber. So I did see Doug's article
and it did cross my mind to build it even if it means getting my stable of
under 3 watts rigs up to the 5 watt limit - hi.

By the way Doug's design uses 12 volts and the transistors in push-pull (or
is that parallel). I just saw another interesting "power" approach. Mike
Agsten WA8TXT of the "Spider" fame has just come out with his third "Spider"
article in the Jan 96 73 magazine. Mike has a design for a 10 watt
transmitter stage using a MOSFET transistor running on 24 volts - yes 24
volts. I think this is a good approach. My experience using a MOSFET final
in my New England QRP Club Colour Burst transmitter had me popping those
inexpensive Radio Shack Mosfets all the time since when I would run at 12
volts the current went wild and I'd continually burn the puppy out. So the
right answer with a MOSFET is to use some higher voltage to get the power
out you need. I think Doug Demaw also had a Mosfet design in one of his
books but he used the higher supply voltage. Anyway some food for thought
and let us know how you do with your "Ontario" QRP kilowatt (sure we have

heard of those West Coast BC kilowatters - but Ontario - the land of conservatism...)

73/72 Bob V01DRB/WA6ERB

At 13:38 1/5/96 EST, you wrote:

>
>Wow. I have to say this qrp list is very dedicated. Seeing how the Jan.
>CQ has a nice linear amp 25w. design by Doug DeMaw. And I see nothing
>about shoes for the 5 watts on qrp-1.
>
>Anyhow, seeing as I raised the issue of an amp for qrp before, I do have
>to say it appears to be a useful circuit. Given my distance from the US
>and bad home antenna this amp would be a good thing to have going - sure,
>I would not be absolute qrp, but the signal would be helped and I'd still
>get to use those nice NorCal, NI1G and OHR rigs.
>
>I can here Rick Zabroski and Bob Gobrick laughing even all the way from
>Calgary and Newfoundland.

>Brien
>Toronto
>Canada
>-21 degrees Celcius
>(BTW, Yellowknife, NWT was the warmest spot on mainland Canada yesterday,
>at -9 degrees)
>
>pepperb@gov.on.ca
>
>

Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada
QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP
Internet: rgobrick@public.compusult.nf.ca
bgobrick@terra.nl.net.nf.ca
Compuserve: 70466.1405@compuserve.com

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: Frank G3YCC <frank@yorks.demon.co.uk>
Subject: [2426] Re: 25 w linear amp
Message-ID: <n9ZgT0ACIb7wEwXE@yorks.demon.co.uk>

In message <Pine.OSF.3.90.960105132248.2697D-1000000@govonca2.gov.on.ca>,

Brien Pepperdine <pepperb@gov.on.ca> writes

>

>Wow. I have to say this qrp list is very dedicated. Seeing how the Jan.

>CQ has a nice linear amp 25w. design by Doug DeMaw. And I see nothing

>about shoes for the 5 watts on qrp-l.

>

>Anyhow, seeing as I raised the issue of an amp for qrp before

And this is QRP? Linears and low power go together like lime and water.

I jest of course!!

Have fun. My one claim to fame is I actually sold a Linear Amplifier to
George Dobbs G3RJV!!! So if he can use one ...

--

Frank G3YCC G QRP CLUB 042. G QRP Club QRP Master's Award 024.

Packet G3YCC @ GB7HUL.#15.GBR.EU

RSGB and ARCI member.

QTHR any call book. Located Near Hull, Yorkshire.

Chairman of the North Ferriby United Amateur Radio Society.

The butterfly counts not years but moments and so has enough time. - Tagore

From qrp-l@lehigh.edu Sat Jan 6 21:18:48 1996

From: "Robert J. Gobrick" <rgobrick@nfld.com>

Subject: [2416] Re: 40 meter coil

Message-ID: <199601060412.AAA17863@public.compusult.nf.ca>

Brian,

If you are a member of the Northern California QRP Club NORCAL they have
some 40 meter crystals available to members for 7.040 KHz - if anything a
good reason to join the club and get the crystal for \$3.

73/72 Bob V01DRB/WA6ERB

At 22:45 1/5/96 EST, you wrote:

>

> Does anyone have Jan Crystals address? Are they still around?

>

>

> This transmitter will be for 40 meters and use a fundamental crystal.

>

```
|-----|
| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRP'er Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet: rgobrick@public.compusult.nf.ca |
| bgobrick@terra.nl.net.nf.ca |
```

Compuserve: 70466.1405@compuserve.com

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: Jacqueline Herman <jherman@sierra.net>
Subject: [2419] Re: 40 meter coil
Message-ID: <Pine.SUN.3.91.960105205839.19595J-1000000@diamond>

Brian: You don't have to use those donuts. I like to wind air-core inductors, instead. Take the info given and determine the inductance. Then use:

$$L = (ND)^2 \backslash (18D + 40S)$$

L = inductance (in uH)
N = number of turns
D = diameter
S = length

This formula is accurate only when $S \gg D$ ("much greater than")
(See any edition of the ARRL Handbook.)

Jeff NH6IL

P.S. I used "\" for "divided by" since the "forward slash" brings up a menu on my comm software (called COMit).

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: Joe Marrah <jmarrah@grfn.org>
Subject: [2436] Re: 75 ohm CATV Cable
Message-ID: <Pine.SOL.3.91.960106142210.2320A-1000000@freenet>

Brian,
Here are some numbers from N6BV's TL program.

Using 250' of coax with a 50 ohm load

	Loss @ 3.5 Mhz	28 Mhz	
RG213/U	0.88dB	2.95dB	
9913	0.60dB	1.73dB	
7/8 75ohm Hard Line (SWR 1.5)	0.26dB	0.87dB	and this stuff is real cheap

73,

Joe

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: John&Suzie_Rollins@pmug.org (John&Suzie Rollins)
Subject: [2417] Re: AutoResponse
Message-ID: <8126430.32801145@pmug.org>

>>User not reachable. SMTP account disabled

I counted 54 of those messages!
ARRGH!!!!
Aint technology wonderful?

-JR

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: k7yha@ix.netcom.com (Richard H. Arland)
Subject: [2441] Re: Could We Spin Off Two Lists and Refocus QRP-L?
Message-ID: <199601070011.QAA14589@ix13.ix.netcom.com>

You wrote:

>

>Have you noticed that two of the most popular topics with QRP-L
>authors are not strictly QRP-related, and are of general interest
>to many if not most hams outside the QRP community?

Don't forget "The Fox"! No offense, guys....but I think the Fox mssgs
deserve a list all their own....

me personally, not interested, don't care.

Now tuners and mobile HF I DO care about. And, in today's cars, running
more than 10 to 20 watts on any frequency is asking for troubles with
the auto manufacturer....especially when you take out one of the on
board computers.

Nah.....we need to leave the qrp-1 just the way it is.

72 rich K7YHA

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996

From: Goran Hosinsky <goran@royac.iac.es>
Subject: [2430] Re: CW and computers
Message-ID: <9601061332.AA02270@royac8.royac.iac.es>

Hello Harry,

To set DTR on COM_1 I believe setting bit 0 at memory position 3FC should do the trick. RTS should be bit 1

For com 2 the address is 2FC.

If this does not work out tell me and I send you my complete notes on the control of the com ports.

73
Goran ea8yu hosinsky@royac.iac.es

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [2444] Re: data invasion of 40 cw
Message-ID: <Pine.LNX.3.91.960106184242.13157B-100000@dt1.datatamers.com>

Dennis,

I worry about it, too. Last evening the speaker at my local radio club was a "data guy" who told us how great amateur and pactor are for sailboats. He says the data band segments are too narrow and he's campaigning for more bandwidth to be allocated for data in the band plans.

My opinion is that data transmissions are disrupting the bands enough as it is!

72, Dave, W6EMD

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [2427] Re: Helical antenna.
Message-ID: <Pine.PMDF.3.91.960106062007.541090063B-100000@utkvx.utk.edu>

On Fri, 5 Jan 1996 N5EM@aol.com wrote:
> In a message dated 96-01-05 00:02:27 EST, you write:

>
> > These helical whips are 1/2 inch or so diameter, but you can use larger
> > forms such as PVC pipe.
> > I'd encourage anyone to try making a helical on a varnished wood or PVC
> form.
> > #16 enamelled wire should be fine for up to 100 watts.
>
> Just a reminder that PVC is not a good RF dielectric. Fine business for a
> form for a helical antenna used for QRP, but beware if you should want to
> pump 50 to 100 watts into this antenna. They have been known to melt.
>
> Ed

As a foot note, the poor RF properties of PVC as the core of an RF induction heating unit (core of a coil) does not prevent its use as a relatively non-conducting support for antenna elements, as a boom for short antennas, etc. In those applications, I have been unable to detect any departure of antenna properties from predictions.

If under power as the core/form of a coil, PVC can melt, it must be converting RF energy into heat. That effect will be proportional to the power involved. So if you are losing at 100 watts X watts as heat, then at 1 watt you are losing $1/100 \times X$ watts as heat. So if PVC is lossy for the QRO op, it is also lossy for the QRP op, even if the heat is undetectable to the fingers. Fiberglass may be better.

-73-
LB, W4RNL

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: cebik@UTKVBX.UTCC.UTK.EDU
Subject: [2428] Re: Helical antenna.
Message-ID: <Pine.PMDF.3.91.960106064350.541090063D-100000@utkvx.utk.edu>

Jim,

Your response to Ed is most interesting. See my note a bit further down the listings on antenna uses not involving use as a coil core.

I think the real question may not be so much whether PVC melts, but whether it creates losses, and to what extent. Many materials can convert RF to heat without melting, depending upon their physical and molecular structure.

So I put the challenge to someone with a thermocouple and other appropriate lab equipment: what is the loss as a percentage of power in

using PVC Schedule 40 as a coil core relative to other materials (air, fiberglass, ceramic, etc.)? The use of PVC as a cheap, readily available material for a variety of ham-related applications makes the question more important than we think. So if anyone has published data or can perform the experiment, I--for one--would be very appreciative of any info that might come forth.

-73-

LB, W4RNL

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: prvalko <prvalko@Oakland.edu>
Subject: [2418] Re: QRP RIGS and COMPUTER NOISE?
Message-ID: <Pine.OSF.3.91.960105235748.1897A-100000@vela.acs.oakland.edu>

On Fri, 5 Jan 1996, litigate wrote:

> I've been out of QRP for 15 years and want to get back in. I used to own an
> HW-8 and an Argonaut 509. I
> have a packetcluster node here in the shack and am wondering how the older
> rigs handle computer noise?

Rick, I believe you have it backwards...

You need to find out how much RFI your COMPUTER generates.

I'm sure your old rigs will hear computer generated hash just as well as the new ones. :-)

73! =paul= wb8zjl

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [2415] Re: SK3 and touch paddles (long!)
Message-ID: <199601060405.AAA17676@public.compuser.net>

Hi Rich,

Good work on your archive retrieval.

Some quick notes on the touch paddles (I know you didn't want to do this commercially), but Ramsey has two items you may be interested in. One that they offered in their new catalog (by the way Ramsey Electronics has really gone upscale with their catalog and they look like they are really going upscale with some of their new kits) is a simple Touch Switch Kit (which uses the CMOS circuit you talk of) for \$6.95 US.

Also I was able to buy from them, as a spare part, the two paddles they use on their fancy touch paddle keyer CW-700 Micro Memory Keyer. I think they sold me the touch paddles for \$4 US. Their touch paddles differ from the ones in my "Copperhead" keyer which, as you mentioned, needed the side of your hand (which rested on a copper pad) as well as your fingers to complete the dits and dahs. Their paddles are a "etched" pc board of spiral hot and ground lands which only need the resistance of your fingers to "gap" the circuit. I am sorry to say that I still have not got around to finishing building my "ultimate" low cost backpacking keyer using these parts. I have found no better portable paddles that would put up with a little abuse in my backpack - I just can't force myself to buy one of those beautiful German made Shurer mini iambic paddles and just "toss" it in my rucksack.

Anyway good luck and keep us informed on your progress for your "travel" rig for your next trip to Poland or wherever you head off to (Albania??)

73/72 Bob V01DRB/WA6ERB

>

>Some more questions

>

>I once built touch paddles with a few cheap CMOS chips. The working principle was the conductivity of the skin, and that has inherent problems. One is that to measure conductivity, you need two points of contact. So it wasn't enough to touch the plates with thumb or finger, in addition to that the hand had to rest on a base plate. Moreover, if my hands were extremely dry, it worked erratically. Luckily normally the excitement of a CW conversation keeps my palms quite moist! ;)

>V01DRB/WA6ERB, from 16 Nov 1994:

>

>> I am still working on a project of mounting the Curtis keyer in a little case and mounting a pair of \$4 Ramsey capacitance-touch paddles and circuitry in the same case - that would make it small, light and cheap. >> I have used touch paddles before (have a paddle called the Copperhead >> that was in May 1991 73 magazine and it really does work half way >> decent.

>

>I think the Copperhead design works on the resistive principle, but how

>about the Ramsey paddles? Do they work well? - I am not really looking
>for a commercial kit, but rather for a good, small, reliable design that
>I could reproduce myself. Low power consumption is essential.

>

>72,

>Richard

>--

>Richard Hieber, DL8MFQ/AA8CP

>EMAIL: Richard.Hieber@rrze.uni-erlangen.de

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| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
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| Internet:      rgobrick@public.compuserve.nf.ca |
|                bgobrick@terra.nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
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From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996

From: markem@primenet.com (Mark Monninger)

Subject: [2432] Re: Take Me to St Louie

Message-ID: <199601061834.LAA10181@usr2.primenet.com>

At 01:16 AM 1/6/96 EST, Robert Wright wrote:

>Information: Received a nice note today from Jim Cates today confirming my
>kit order at #102. This is DESPITE using the wrong zip code in the address
>to him. So, if you mailed off a request/check to him with the wrong zip,
>there is no substantial delay (I mailed mine 12/29/95). ...

Hmmm...I sent mine in around mid-Dec and haven't received any confirmation
yet (now, having said that it'll probably come in today's mail). Sure hope
it didn't get misplaced...

73... Mark AA7TA

NorCal #1233

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996

From: cebik@UTK.VX.UTCC.UTK.EDU

Subject: [2429] Re: Using PVC in antenna designs

Message-ID: <Pine.PMDF.3.91.960106065821.541090063E-100000@utkvx.utk.edu>

A few moments ago, I posed what I thought to be the real question about

PVC, only to find that Dennis has already done the relevant testing.

Amazing what this list can do: reverse the time order between question and answer. Many thanks to Dennis for sharing the data. I learned some new about plastics relative to heat generation under RF--not just the numbers, but how it works. That's appreciated.

-73-

LB, W4RNL

From qrp-1@lehigh.edu Sat Jan 6 21:18:48 1996
From: prvalko <prvalko@Oakland.edu>
Subject: [2421] Re: VHF LIST INFO
Message-ID: <Pine.OSF.3.91.960106004828.10403A-100000@vela.acs.oakland.edu>

On Fri, 5 Jan 1996, Harry Chase wrote:

> To all who asked me directly about the VHF reflector: (there were many
> so I'm posting to the list!)
> Send to <vhf-request@w6yx.stanford.edu>

Close but no cigar... Try this:

Send a message to:
majordomo@w6yx.stanford.edu

In the text just put one line as follows:
subscribe vhf your_email_name@your_internet_service_provider

For example, mine said:
subscribe vhf prvalko@oakland.edu

Ta DA!

73! =paul= wb8zjl